The parabolic elements given by Lieut.-General Tennant on p. 26, vol. xlvii. of the *Monthly Notices*, give the following residuals for the above three normal places :—

Observation—Computation.

Cos δdR.A.	$-4{\cdot}8$	$-85{\cdot}7$	$-141{\cdot}4$
$d\delta$	$+612{\cdot}5$	$+656{\cdot}7$	$+685{\cdot}3$

Note.—When the above results were communicated to the Society, I was not in possession of the correction to the inclination of Lieut.-General Tennant's parabola given on p. 394 of the present volume. With this correction the errors (observation—computation) of the parabolic elements are respectively—

Cos δd R.A.	$-17{\cdot}1$	$-13{\cdot}2$	$+18{\cdot}2$
$d\delta$	$-7{\cdot}3$	$-6{\cdot}5$	$-2{\cdot}9$

I think the orbit is undoubtedly elliptic, but what the eccentricity is it is impossible to state with certainty.

The Melbourne observations referred to above are those given in the *Astronomische Nachrichten*, and were published after my former paper on this subject was communicated to the Society.

The Orbits of Comets Fabry and Barnard-Hartwig. By J. Morrison, M.D., Ph.D., Assistant on the American Ephemeris, and Professor of Chemistry in the National University, Washington.

Comet Fabry.

The observations upon which the following hyperbolic elements of this comet are founded are as follow :—

Greenwich M.T.	Appar. α	Appar. δ
d	h m s	o ′ ″
1885, Dec. 7·536032	0 24 46·01	$+20$ 52 34·9
1886, Mar. 7·316539	23 19 42·92	$+31$ 16 44·8*
„ April 1·339713	23 18 30·86	$+38$ 37 57·0
„ June 6·953118	8 47 52·15	-40 38 0·5

The first is a meridian observation made at Ann Arbor; the second results from extra meridian observations made at Greenwich and Paris, the comparison star being the same at both places; the third was made at Bothkamp and was obtained from *Astronomische Nachrichten*, No. 2703; and the fourth was made at Sydney, the comet being at the time " extremely faint, but in a good position for observation with Cape Cat. (1880) 4707," fifty comparisons having been made. (*Monthly Notices*, vol. xlvi. p. 496.) These observations were corrected for aberration and parallax by means of approximate parabolic elements.

* Geocentric.

T	1886, April 5$\overset{\text{d}}{\cdot}$9520 Greenwich M.T.	
ω	126$\overset{\circ}{ }$ 34$'$ 49$\overset{''}{\cdot}$215	
Ω	36 22 11·454 Mean Equinox, 1886·0	
i	82 37 6·012	
e	1·00047857	
log a	3·1278354	
log q	9·8077809	

The two middle places are well represented.

The interval between the extreme observations is 181·42 days, during which the comet described 208° 9′ of its orbit.

Comet Barnard-Hartwig. 1886.

From the following observations the first and third of which were made at Washington, D.C., and the second at Kiel (*Astronomische Nachrichten*, 2753), an elliptic orbit of long period is obtained, the elements of which are given below :—

Greenwich M.T. d	Appar. α. h m s	Appar. δ.
1886, Oct. 7·918987	10 42 9·32	+ 1° 22′ 6″·3
„ „ 29·708660	11 39 22·82	+ 5 49 19·4
„ Dec. 2·976975	15 32 3·91	+17 58 55·8

By means of approximate parabolic elements computed from a shorter interval, the corrections for aberration and parallax were obtained and applied.

T	1886, Dec. 16$\overset{\text{d}}{\cdot}$514158 Greenwich M.T.
ω	86$\overset{\circ}{ }$ 21$'$ 58$\overset{''}{\cdot}$570
Ω	137 21 36·163 Mean Equinox, 1886·0
i	78 22 25·525
e	0·99872521
log a	2·7162151
log q	9·8216538

Motion retrograde. The middle place is exactly represented. These elements give a period of 11,866 years, which is of course very uncertain, since the interval between the extreme observations is far too short to determine this element accurately in an orbit such as this is.

The formulæ for the equatorial rectangular coordinates are—

$$x = [9\cdot8740086]\, r \sin(v + \ \ 6\overset{\circ}{ }\ 52'\ 45''\cdot171)$$

$$y = [9\cdot8268980]\, r \sin(v + 198\ \ 35\ \ 9\cdot651)$$

$$z = [9\cdot9977333]\, r \sin(v + 102\ \ \ 5\ \ 28\cdot657)$$